

From the INTERNATIONAL BUREAU

PCT

**NOTIFICATION OF ELECTION**  
(PCT Rule 61.2)

To:

Assistant Commissioner for Patents  
United States Patent and Trademark  
Office  
Box PCT  
Washington, D.C.20231  
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 04 September 2000 (04.09.00)	
International application No. PCT/US99/00145	Applicant's or agent's file reference AA384F/JH
International filing date (day/month/year) 13 January 1999 (13.01.99)	Priority date (day/month/year)
Applicant BABA, Hajime et al	

1. The designated Office is hereby notified of its election made:

in the demand filed with the International Preliminary Examining Authority on:

04 August 2000 (04.08.00)

in a notice effecting later election filed with the International Bureau on:

2. The election  was

was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer  Olivia TEFY
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

## PATENT COOPERATION TREATY

PCT

15

REC'D 24 JAN 2001
WIPO PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference AA384F/JH	<b>FOR FURTHER ACTION</b>		See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/US99/00145	International filing date (day/month/year) 13/01/1999	Priority date (day/month/year) 13/01/1999	
International Patent Classification (IPC) or national classification and IPC C11D3/22			
Applicant THE PROCTER & GAMBLE COMPANY et al.			

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I  Basis of the report
- II  Priority
- III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV  Lack of unity of invention
- V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI  Certain documents cited
- VII  Certain defects in the international application
- VIII  Certain observations on the international application

Date of submission of the demand 04/08/2000	Date of completion of this report 19.01.2001
Name and mailing address of the international preliminary examining authority: European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Binder, R Telephone No. +49 89 2399 8951
	

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US99/00145

## I. Basis of the report

1. This report has been drawn on the basis of (*substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments (Rules 70.16 and 70.17).)*:  
**Description, pages:**

1-43                   as originally filed

## Claims, No.:

1-10                   as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description,               pages:
- the claims,                   Nos.:
- the drawings,               sheets:

5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/US99/00145

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes:      Claims
	No:      Claims 1-10
Inventive step (IS)	Yes:      Claims
	No:      Claims 1-10
Industrial applicability (IA)	Yes:      Claims 1-10
	No:      Claims

2. Citations and explanations  
**see separate sheet**

**VII. Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:  
**see separate sheet**

**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:  
**see separate sheet**

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US99/00145

**Ad section V.:**

1. The following documents are cited herein:

D1 = EP-A-0100125

D2 = WO-A-98/29528

D3 = Database WPI, AN 82-.83057E & SU-B-883168

D4 = US-A-3360470

2. Laundry detergent compositions comprising an anionically modified cellulose falling within the scope of the present claims and a cationic metal ion at a molar ratio of 50:1 to 1:50 were already known from the prior art (see D1: examples; D2: examples with polymer C; D3; and D4: examples 2 and 3).

Therefore, the subject-matter of claim 1 lacks novelty (Article 33(2) PCT).

The additional features of claims 2 to 7 are disclosed in all of D1 to D4. Moreover, D1 discloses also the additional features of claims 8 and 9 and D2 those of claims 8 and 10.

Therefore, all the remaining claims also lack novelty.

**Ad section VII.:**

1. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1 to D4 is not mentioned in the description, nor are these documents identified therein.
2. The independent claims are not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would have been appropriate, with those features known in combination from the prior art (Document D1 or D2) being placed in a preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in a characterising part (Rule 6.3(b)(ii) PCT).

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US99/00145

2. The description refers on page 28 to the not published documents USSN 08/136,626 and PCT/US95/07823 and on page 34 to the not identifiable PCT 90/01815.

**Ad section VIII.:**

The word "about" used in context with numerical ranges in the claims detracts from the clarity of such claims.

## INTERNATIONAL COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>AA384F/JH</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/US 99/ 00145</b>	International filing date (day/month/year) <b>13/01/1999</b>	(Earliest) Priority Date (day/month/year)
Applicant <b>THE PROCTER &amp; GAMBLE COMPANY et al.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.  
 It is also accompanied by a copy of each prior art document cited in this report.

## 1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
- the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:
- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2.  Certain claims were found unsearchable (See Box I).
3.  Unity of invention is lacking (see Box II).

## 4. With regard to the title,

- the text is approved as submitted by the applicant.
- the text has been established by this Authority to read as follows:

## 5. With regard to the abstract,

- the text is approved as submitted by the applicant.
- the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

## 6. The figure of the drawings to be published with the abstract is Figure No.

- as suggested by the applicant.
- because the applicant failed to suggest a figure.
- because this figure better characterizes the invention.

None of the figures.

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 99/00145

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 C11D3/22 C11D3/04

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C11D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 98 29528 A (PROCTER & GAMBLE) 9 July 1998 (1998-07-09) page 8, paragraph 3 - page 9, paragraph 2 page 14, line 6 - page 15, line 3 claims; examples 1,2; table C ---	1-10
X	EP 0 100 125 A (PROCTER & GAMBLE) 8 February 1984 (1984-02-08) claims 1-9; examples ---	1,2,4-6, 8
X	DATABASE WPI Section Ch, Week 8239 Derwent Publications Ltd., London, GB; Class A97, AN 82-83057E XP002114949 & SU 883 168 B (CHEM IND RES DES), 23 November 1981 (1981-11-23) abstract --- -/-	1,2,4-6

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

° Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the international search report

13 September 1999

21/09/1999

Name and mailing address of the ISA

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Fax: (+31-70) 340-3016

Authorized officer

Grittern, A

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/00145

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2 579 381 A (G.O. FUNDERBURK) 18 December 1951 (1951-12-18) column 2, line 17 - column 3, line 70; claims ---	1, 2, 4
A	US 3 360 470 A (H.E. WIXON) 26 December 1967 (1967-12-26) claims -----	1, 2, 5, 6

**INTERNATIONAL SEARCH REPORT**

Info on patent family members

International Application No

PCT/US 99/00145

Patent document cited in search report	Publication date	Patent family member(s)			Publication date
WO 9829528	A 09-07-1998	NONE			
EP 0100125	A 08-02-1984	AT 39126 T		15-12-1988	
		CA 1217107 A		27-01-1987	
		DE 3378637 A		12-01-1989	
		GR 78636 A		27-09-1984	
		IE 55461 B		26-09-1990	
		JP 2006230 C		11-01-1996	
		JP 7013237 B		15-02-1995	
		JP 59085000 A		16-05-1984	
SU 883168	B 23-11-1981	NONE			
US 2579381	A 18-12-1951	NONE			
US 3360470	A 26-12-1967	AU 3836563 A			
		BE 643539 A		29-05-1964	
		CH 475345 A		15-07-1969	
		DE 1469279 A		12-12-1968	
		DK 130353 B		10-02-1975	
		FR 1390457 A		16-06-1965	
		GB 1053388 A			
		NL 6405807 A		30-11-1964	
		OA 859 A		15-11-1967	
		SE 317763 B		24-11-1969	

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WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 :	A1	(11) International Publication Number:	WO 00/42144
C11D 3/22, 3/04		(43) International Publication Date:	20 July 2000 (20.07.00)

(21) International Application Number:	PCT/US99/00145	(81) Designated States:	AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), EE, EE (Utility model), ES, FI, FI (Utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
(22) International Filing Date:	13 January 1999 (13.01.99)		
(71) Applicant (for all designated States except US):	THE PROCTER & GAMBLE COMPANY [US/US]; One Procter & Gamble Plaza, Cincinnati, OH 45202 (US).		
(72) Inventors; and			
(75) Inventors/Applicants (for US only):	BABA, Hajime [JP/JP]; Living Fukaekitamachi B-2, 10-12, Fukaekita-machi, Higashinada-ku, Kobe 658-0013 (JP). MURATA, Susumu [JP/US]; 9574 Wabash Way, West Chester, OH 45069 (US). WANG, Jiping [CN/US]; 6546 Glenarbor Drive, West Chester, OH 45069 (US).		
(74) Agents:	REED, T., David et al.; The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45217-1087 (US).		

(54) Title: DETERGENT COMPOSITIONS HAVING A CELLULOSE POLYMER

(57) Abstract

The present invention relates to a laundry detergent composition comprising an anionically modified cellulose (AMC); and a cationic metal ion. The molar ratio of the anionically modified group of the AMC to the cationic metal ion is preferably from about 50:1 to about 1:50. The laundry detergent composition containing such materials maintain a good fabric appearance, such as better pill/fuzz prevention and color maintenance.

***FOR THE PURPOSES OF INFORMATION ONLY***

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
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DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						

# INTERNATIONAL SEARCH REPORT

International Application No

PC1, US 99/00145

A. CLASSIFICATION OF SUBJECT MATTER  
 IPC 7 C11D3/22 C11D3/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
 IPC 7 C11D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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- "O" document referring to an oral disclosure, use, exhibition or other means
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- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of mailing of the international search report

21/09/1999

Name and mailing address of the ISA

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## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/00145

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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A	US 3 360 470 A (H.E. WIXON) 26 December 1967 (1967-12-26) claims -----	1,2,5,6

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

PCT/US 99/00145

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9829528 A	09-07-1998	NONE	
EP 0100125 A	08-02-1984	AT 39126 T CA 1217107 A DE 3378637 A GR 78636 A IE 55461 B JP 2006230 C JP 7013237 B JP 59085000 A	15-12-1988 27-01-1987 12-01-1989 27-09-1984 26-09-1990 11-01-1996 15-02-1995 16-05-1984
SU 883168 B	23-11-1981	NONE	
US 2579381 A	18-12-1951	NONE	
US 3360470 A	26-12-1967	AU 3836563 A BE 643539 A CH 475345 A DE 1469279 A DK 130353 B FR 1390457 A GB 1053388 A NL 6405807 A OA 859 A SE 317763 B	29-05-1964 15-07-1969 12-12-1968 10-02-1975 16-06-1965 30-11-1964 15-11-1967 24-11-1969